

DOCKET NO. SC11641TS

REMARKS

In an Office Action mailed June 4, 2004, pending claims 1-52 were examined. Claims 1-52 were rejected. In response, Applicants are herein amending claims 1, 7, 14, 16, 17, 19, 27-29, 32, 35-40, 44, 46-48 and 51, and respectfully request the reconsideration and allowance of claims 1-52, thereby placing the application in condition for allowance. Applicants thank the Examiner for the quality search and examination response provided in the substantive response.

Claims 1-52 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite in connection with two specifically identified phrases. In claim 1, the term "without being internalized prior to execution" was stated to not be explicit as to whether there was execution without internalization at all or without pre-internalization. Claim 1 is herein amended to recite that the reusable executable image created by a pre-internalizing operation is capable of being executed "without any internalization prior to execution". Thus claim 1 clearly recites that the reusable executable image is created by a pre-internalization and that no internalization prior to execution is thereafter required to execute the reusable executable image. Withdrawal of the rejection of claim 1 is herein requested.

Claim 19 was rejected in connection with the term "without subsequently internalizing" for not making clear if this refers to without pre-internalizing or executing without internalizing at all. Claim 19 is herein amended to clearly recite that the reusable executable image, which is created in the recited "pre-internalization mode" is executed without internalizing at all. Claim 19 recites that the image is "executed without any further internalization of the selected program file prior to execution". Withdrawal of the rejection of claim 19 is herein requested.

Claims 27, 37 and 44 were rejected for the same reasons as stated in connection with claim 1. Each of claims 27 and 37 is herein amended to recite that the reusable executable image created by a pre-internalizing operation is capable of being executed "without any internalization prior to execution". Claim 44 is herein amended to recite that the selected program file is executed "without any further internalization of the selected program file prior to execution by any subsequent invocation of the virtual machine". Therefore, withdrawal of the rejection of claims 27, 37 and 44 under 35 U.S.C. 112, second paragraph, is herein requested.

Claims 1-4, 7-9, 12-25, 27-29, 32-41, 43-48 and 51-52 were rejected under 35 U.S.C.

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103(a) as being unpatentable over Chan et al. (U.S. Patent 6,470,494) in view of Brandt et al. (U.S. Patent 4,695,950). As stated in the Abstract of the Chan et al. patent, the Chan et al. system is a system for loading of classes during the execution of Java programs (emphasis added). The Chan et al system loads classes only during a current instantiation of the program being executed. The Chan et al. system does not "create a reusable executable image" of a program file. There is no teaching or suggestion at Col. 1, lines 7-25, as referenced in the rejection basis that teaches a reusable executable image. Rather, line 25 of Col. 1 states that class loading also occurs "when a Java program dynamically attempts to load another class at run time" (emphasis added). Chan et al. teach a system in which executables are loaded at run time. Independent claims 1, 19 and 44 presently rejected on this combination of prior art references recite that the pre-internalized images of selected program files are capable of being executed without any internalization prior to any subsequent invocation (i.e. starting or rebooting) of the virtual machine (VM). Neither reference teaches or suggests this functionality. Neither reference teaches or suggests as recited in independent claim 27 that "the reusable executable image is capable of being executed by the virtual machine without any internalization prior to execution". Neither reference teaches or suggests as recited in dependent claim 37 that the "virtual machine is capable of executing the reusable executable image without any internalization of the reusable executable image prior to executing, thereby subsequently avoiding internalizing the program file for subsequent program execution." Applicants were referenced in paragraph 18 to Col. 2, lines 47-67 of Chan et al. for teaching the proposition of a reusable pre-internalized image. However, Chan et al. do not teach or suggest storing a reusable executable image "capable of being executed by any subsequent invocation of the virtual machine".

As noted in the Office Action, Chan et al. do not explicitly teach that the pre-internalizing is done into a native memory structure of the virtual machine. It was also noted that Chan et al. do not teach a pre-internalization mode. Brandt was cited for these propositions. However, Brandt teaches a system for data processing address translation and is unrelated to a virtual machine. In other words, the Brandt address translation is for translating a virtual or effective address to a real or physical address and is not related to translation of a program file into a native memory structure of a virtual machine. As such, the Brandt teachings are an unrelated context to the recited method of claims 1-4, 7-9, 12-25, 27-29, 32-41, 43-48 and 51-52.

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Applicants respectfully request the reconsideration and withdrawal of the stated rejection.

Claims 5-6, 10-11, 26, 30-31, 42 and 49-50 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. (U.S. Patent 6,470,494) in view of Brandt et al. (U.S. Patent 4,695,950) and further in view of Applicant's Admitted Prior Art. Applicants' admitted prior art is used for the proposition that having a device be a portable device is known. While this proposition, taken alone, is accurate, it is not obvious from this combination of references to store reusable executable images in permanent memory for future use to avoid subsequent initialization in any subsequent invocation of a VM. This enhanced functionality minimizes the use of dynamic memory and execution time of new program files which reduces power consumption, all of which are strategic commercial advantages for a portable device. While such product objectives are known in the industry, the recited method of the rejected claims, including the base claim limitations, which implements these objectives are novel. Applicants request the withdrawal of the stated rejection and the allowance of claims 1-52, as amended herein, thereby placing the application in condition for allowance. Should issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned at (512) 996-6839.

Respectfully submitted,

SEND CORRESPONDENCE TO:

Freescale Semiconductor, Inc.
Customer Number: 23125

By: 

Robert L. King
Attorney of Record
Reg. No.: 30,185
Telephone: (512) 996-6839
Fax No.: (512) 996-6854